ARIZONA

ACCESS MANAGEMENT

ADOT Agency Outreach Meeting

DATE

ADOT

Introduction

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District Engineer Name

ADOT XXXXX District Engineer

What is Access Management?

The systematic management of the location, spacing, design, and operation of:

Access Features Typically Managed

- Traffic Signals (uniform spacing)
- Medians (to control left turns and direct access)
- Connections (minimum spacing, location and design)
- Median openings (minimum spacing and design)
- Interchanges and access in the vicinity of interchanges

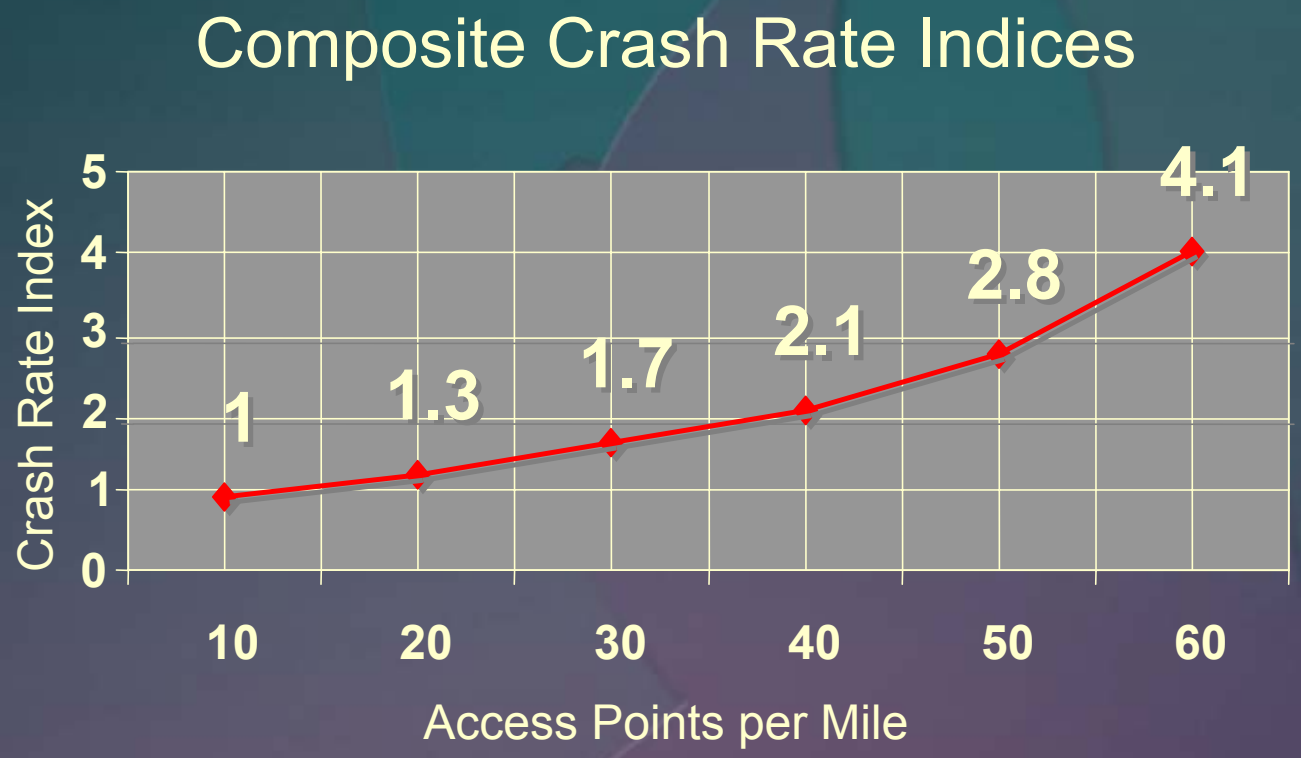
Benefits of Access Management

- **Safety**
  - Reduces crashes up to 50%
  - Improves pedestrian/bicycle safety
- **Mobility**
  - Increases roadway capacity 23% to 45%
  - Reduces travel time and delay 40% to 60%
- **Economic**
  - Preserves market area for businesses
  - Improves customer safety and convenience
  - More efficient freight movement
  - Positive effect on property values

Benefits of Access Management
continued

- **Land Use/Aesthetic**
  - More area for landscaping
  - Helps preserve community/ scenic character
  - Promotes more efficient land use and site design
- **Environmental**
  - Reduced emissions and fuel consumption due to improved traffic progression
  - Avoids substandard access to lot splits, which can degrade environmentally sensitive areas

NHCRP Report 420 - Impacts of Access Management Techniques



Source: NCHRP Report 420, TRB 1999

Crashes in Arizona, 2003

- Over 131,000 crashes annually
- About 360 daily
- 71,900 people injured
- 1,118 killed in 2003; 1,150 in 2004 (+3%)
- Arizona fatality rate is about 33% above the national average (crashes per 100 mvm)
- $3.2 billion in economic losses

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Access Related Crashes in Arizona

Annual Average (2000-2004)

- 41,952 injuries annual average.

  56.5% of all injuries

- 293 fatalities annual average.

  26.6% of all deaths

- Intersection related injuries are

  48.2% of all injuries

ADOT

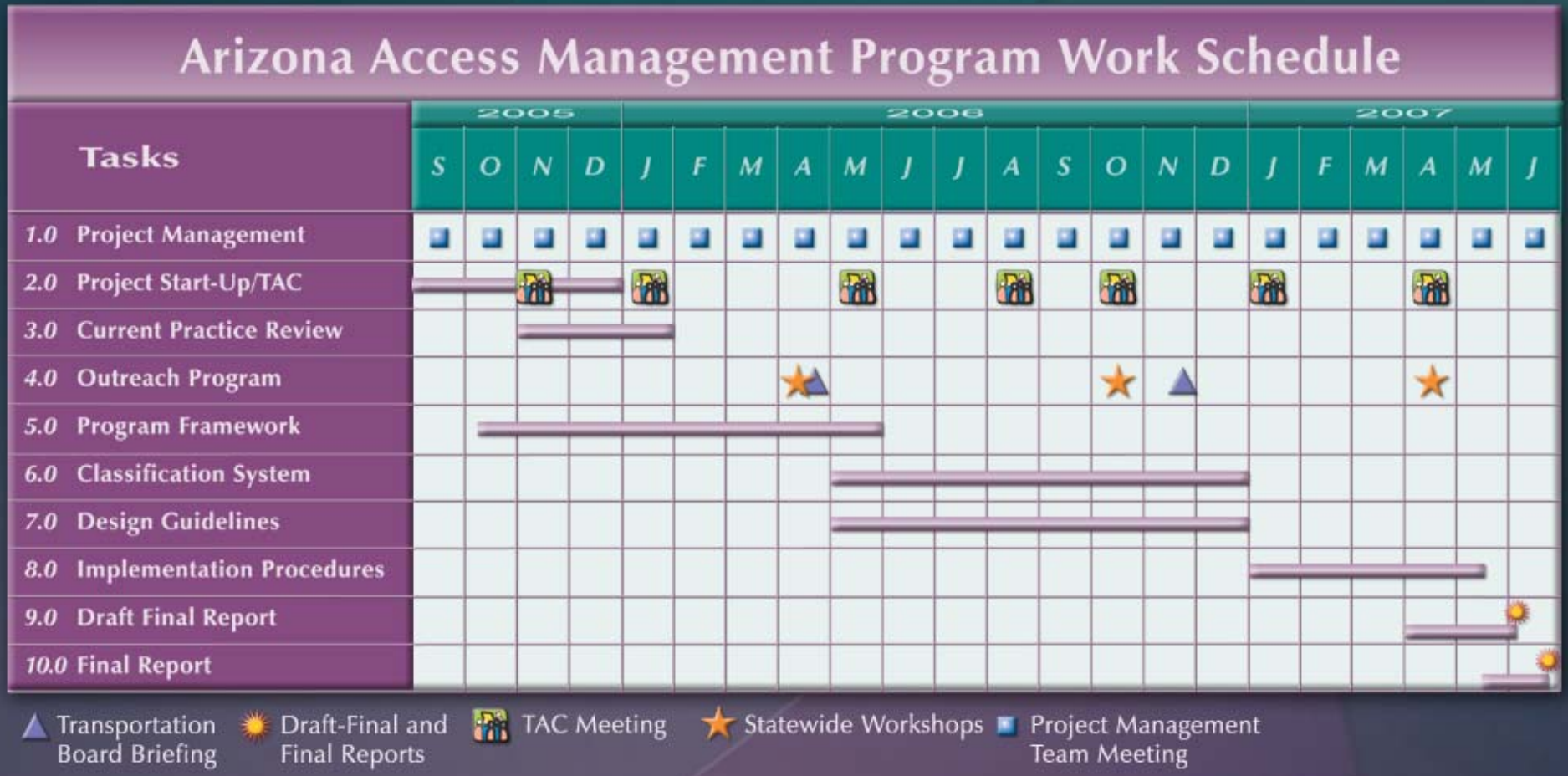
Project Overview

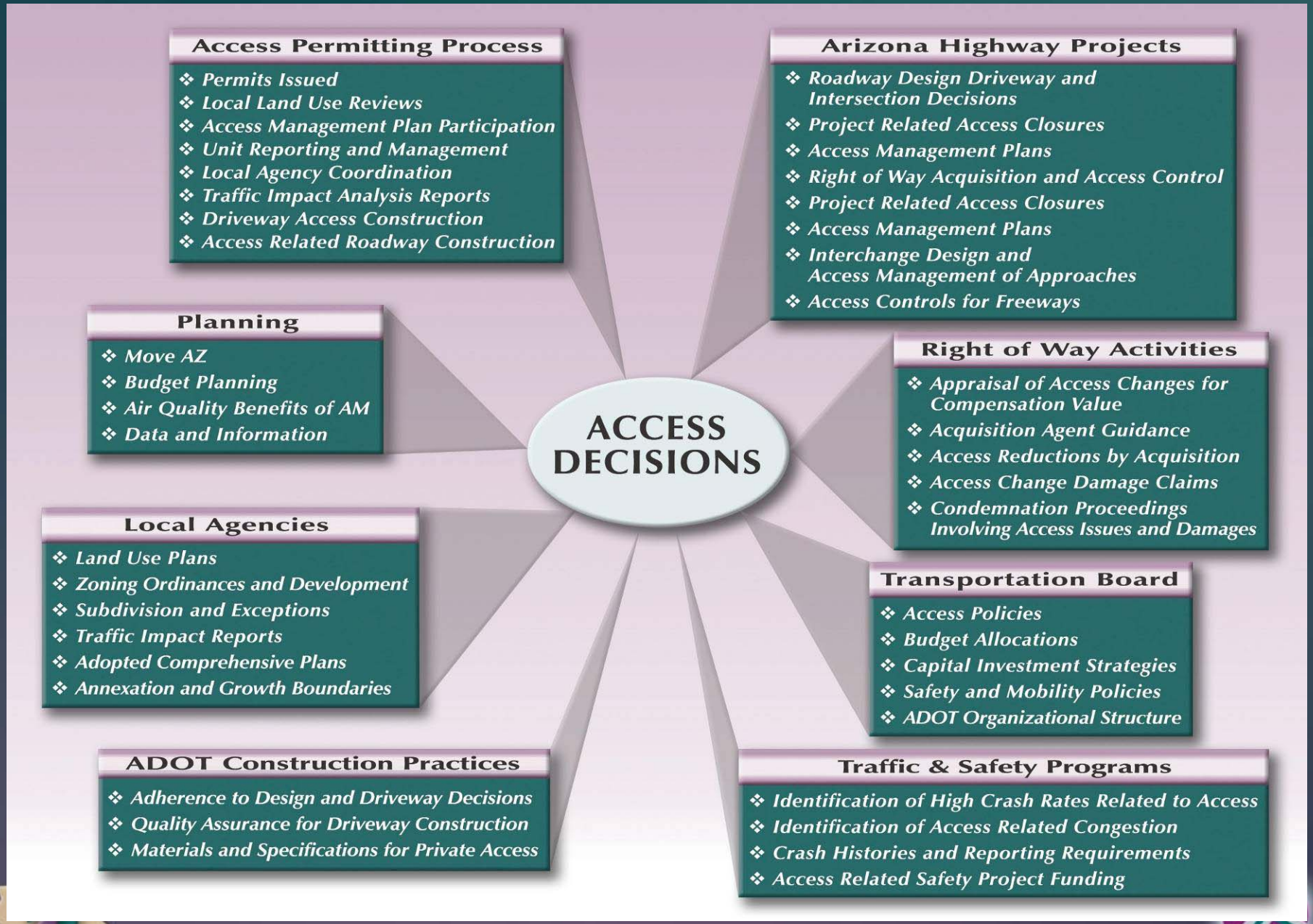
Policy Initiative

- ADOT studied the issues regarding access management in the *Access Management Policy & Legislative Study* completed in 2002.
- In August 2003, the State Transportation Board directed ADOT to develop and implement a comprehensive access management program *(Policy 12*), by:
  - **Developing an access management classification system.**
  - **Developing a comprehensive access management manual.**
  - **Working closely with regional planning agencies and local governments in order to coordinate system planning.**
  - **Purchasing access rights, where appropriate and feasible.**
  - **Maintaining approximate minimum spacing between interchanges.**
  - **Taking into account potential ramifications to corridors.**
  - **Reassessing road segments as demand changes over time.**

Arizona Access Management Program Work Flow Diagram

Schedule


Arizona Access Management Program Work Schedule
Tasks
2005
2006
2007
S O N D J F M A M J J A S O N D J F M A M J
1.0 Project Management
2.0 Project Start-Up/TAC
3.0 Current Practice Review
4.0 Outreach Program
5.0 Program Framework
6.0 Classification System
7.0 Design Guidelines
8.0 Implementation Procedures
9.0 Draft Final Report
10.0 Final Report
Transportation Board Briefing
Draft-Final and Final Reports
TAC Meeting
Statewide Workshops
Project Management Team Meeting


Access Permitting Process
Permits Issued
Local Land Use Reviews
Access Management Plan Participation
Unit Reporting and Management
Local Agency Coordination
Traffic Impact Analysis Reports
Driveway Access Construction
Access Related Roadway Construction
Arizona Highway Projects
Roadway Design Driveway and Intersection Decisions
Project Related Access Closures
Access Management Plans
Right of Way Acquisition and Access Control
Project Related Access Closures
Access Management Plans
Interchange Design and Access Management of Approaches
Access Controls for Freeways
Planning
Move AZ
Budget Planning
Air Quality Benefits of AM
Data and Information
ACCESS DECISIONS
Right of Way Activities
Appraisal of Access Changes for Compensation Value
Acquisition Agent Guidance
Access Reductions by Acquisition
Access Change Damage Claims
Condemnation Proceedings Involving Access Issues and Damages
Local Agencies
Land Use Plans
Zoning Ordinances and Development
Subdivision and Exceptions
Traffic Impact Reports
Adopted Comprehensive Plans
Annexation and Growth Boundaries
Transportation Board
Access Policies
Budget Allocations
Capital Investment Strategies
Safety and Mobility Policies
ADOT Organizational Structure
ADOT Construction Practices
Adherence to Design and Driveway Decisions
Quality Assurance for Driveway Construction
Materials and Specifications for Private Access
Traffic & Safety Programs
Identification of High Crash Rates Related to Access
Identification of Access Related Congestion
Crash Histories and Reporting Requirements
Access Related Safety Project Funding

Vision Statement

Develop a Statewide Access Management Program that provides consistency of program decisions and process while maintaining flexibility to assure reasonable access. Create a partnership with local agencies to balance local planning and economic goals with the safe and efficient operation of the State Highway System.

Program Objectives

1) Develop a comprehensive access management program structure within ADOT departments.

2) Develop access spacing and design standards.

3) Update interchange design and spacing criteria and establish minimum spacing standards.

4) Update ADOT roadway design guidelines and traffic engineering policies.

5) Establish a statewide access classification system that assigns access classifications to each state highway.

- continued

Program Objectives, continued

6) Strengthen and standardize the access permit process

7) Provide for a strategic approach to the acquisition of access rights

8) Establish clear procedures and guidance for adoption and implementation of corridor access management plans

9) Provide outreach, technical assistance, and incentives to encourage local government participation

- continued

Program Objectives, continued

10) Develop materials that clearly communicate the importance of access management to stakeholder group.
11) Develop an access management program organizational structure that builds on the existing staffing and structure.
12) Identify start-up and on-going funding needs for a statewide access management program.

Local Agency Perspective on Access Management

- Current Practice
- Coordination with ADOT

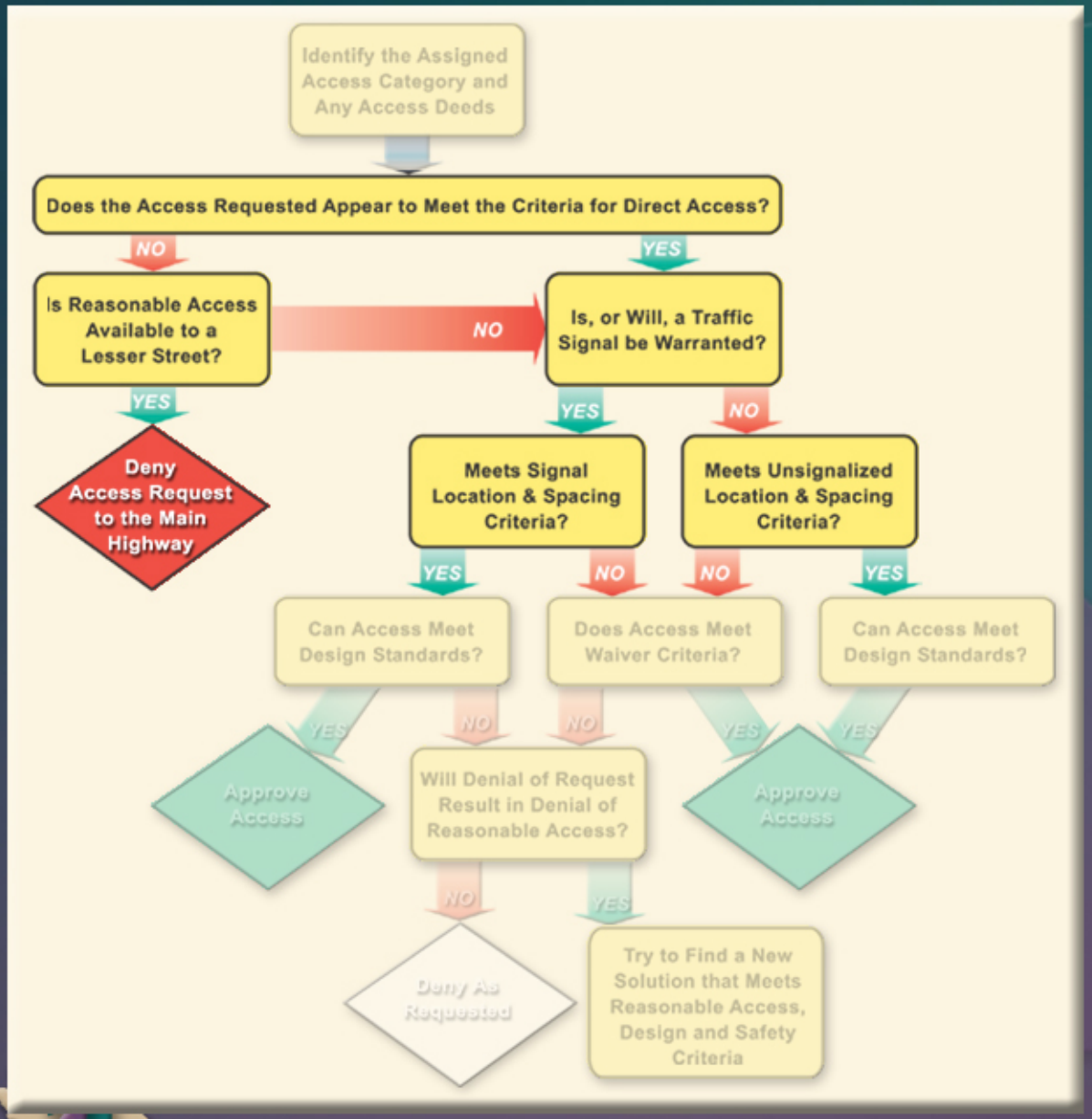
How Will a Statewide Access Management Program Work?

Conceptual Access Management Decision Flow Chart

ADOT/Local Agency Coordination

- **Who?** *ADOT -Permits, Development Engineer, Others. Local Agency-Planning/ Zoning, Transportation, Engineer Staff*
- **When?** *How often? Scheduled meetings? Meet in person?*
- **What?** *What type of review, comments, conclusions?*

Conceptual Access Management Decision Flow Chart



Classification System

- What is it?
- What does it look like?

Access Classifications: The Heart of the Program

- From freeways to frontage roads, access decisions determine performance
- A classification system provides day to day permitting actions that support the state/regional local transportation plans
- A classification system allows the level of management to fit the land planning conditions
- The access category identifies the performance expectations of the highway

Hierarchy of Access Classifications

- Establish Standards for achieving a roadways intended function.
- Classification standard determines ***IF*** access or signal allowed, and where.
- Classify the entire system by route, segment and mile.

Access Classification Considerations

- State wide plans
  - Long range purpose, function, of road
  - Capacity is not a direct consideration
- Current roadway conditions
- Current and future land use
- Long Term Vision
- Realistic approach

Colorado Classification System

Table of access categories, with approximate descriptions	
F-W Interstate System, Freeway Facilities	
E-X Expressway, Major Bypass	
Rural	Non-Rural
R-A Regional Highway	NR-A Regional Highway
R-B Rural Highway	NR-B Arterial
	NR-C Arterial
F-R Frontage Roads (both urban and rural)	

STATE HIGHWAY ACCESS CATEGORY ASSIGMENT SCHEDULE
SECTION TWO, ACCESS CATEGORY ASSIGNMENTS
Revised January 18, 2001

Highway	Beg_MP	End_MP	CO	CAT	PHYSICAL DESCRIPTION OF THE CATEGORY SEGMENT
001A	0.000	9.157	069	RB	FROM JCT SH 287 (COLLEGE AVE) IN FORT COLLINS TO 2ND ST IN WELLINGTON
001A	9.157	9.405	069	NRA	FROM 2ND ST TO 1ST ST IN WELLINGTON
001A	9.405	9.960	069	NRB	FROM 1ST ST IN WELLINGTON TO I-25 INTERCHANGE, END SH 1A
002A	0.000	2.146	031	NRB	FROM JCT SH 285 (HAMPDEN AVE), ALONG COLO BLVD, TO I-25 INTERCHANGE IN DENVER
002A	2.146	4.468	031	NRB	FROM I-25 INTERCHANGE TO JCT SH 83 (LEETSDALE DR)
002A	4.468	6.000	031	NRB	FROM JCT SH 83 (LEETSDALE DR), ALONG COLO BLVD TO JCT SH 40 (COLFAX AVE) IN DENVER
002A	6.000	8.310	031	NRB	FROM JCT SH 40 (COLFAX AVE) TO JCT SH 33 (40TH AVE) IN DENVER
002A	8.310	8.579	031	NRB	FROM JCT SH 33 (40TH AVE) TO SMITH RD INTERCHANGE IN DENVER
002A	8.579	8.774	031	NRB	FROM SMITH RD INTERCHANGE TO I-70 INTERCHANGE IN DENVER
002A	8.774	9.478	031	NRB	FROM I-70 INTERCHANGE TO SH 6 INTERCHANGE (VASQUEZ BLVD)
002A	9.587	9.842	001	EX	FROM JCT SH 6 (VASQUEZ BLVD) TO JCT SH 6 (VASQUEZ BLVD) AT ADAMS/DENVER CO LINE, END SH 2A
002B	11.001	11.209	001	NRC	FROM JCT SH 6 (VASQUEZ BLVD) IN COMMERCE CITY TO SH 6 INTERCHANGE (VASQUEZ BLVD)
002B	11.209	13.345	001	NRC	FROM SH 6 INTERCHANGE (VASQUEZ BLVD) TO QUEBEC ST, END SH 2B
002C	12.895	17.000	001	NRA	FROM QUEBEC ST TO JCT SH 44 (104TH AVE)
002C	17.000	18.999	001	NRA	FROM JCT SH 44 (104TH AVE) TO I-76 INTERCHANGE IN COMMERCE CITY, END SH 2C
002D	0.000	1.000	001	RB	FROM I-76 INTERCHANGE TO JCT SH 22 (124TH AVE)
002D	1.000	4.092	001	RB	FROM JCT SH 22 (124TH AVE) TO BROMLEY LANE IN BRIGHTON
002D	4.092	4.999	001	NRC	FROM BROMLEY LANE TO JCT SH 7 (BRIDGE ST) IN BRIGHTON, END SH 2D
003A	0.000	2.194	067	NRB	FROM JCT SH 160 IN DURANGO TO 2ND ST, END SH 3A
005A	0.000	14.894	019	RA	FROM JCT SH 103 (ECHO LAKE) TO SUMMIT OF MT EVANS, END SH 5A
006A	11.212	15.449	077	RA	FROM I-70 INTERCHANGE (MACK) TO JCT SH 139 (LOMA)
006A	15.449	19.210	077	RA	FROM JCT SH 139 (LOMA) TO K.00 RD
006A	19.210	19.955	077	NRB	FROM K.00 RD TO JCT SH 340 (ASPEN ST) IN FRUITA
006A	19.955	21.261	077	NRB	FROM SH 340 (ASPEN ST) TO PINE ST IN FRUITA
006A	21.261	25.772	077	RA	FROM PINE ST IN FRUITA TO PERSIGO WASH STR H-02-D
006A	25.772	25.998	077	NRA	FROM PERSIGO WASH STR H-02-D TO I-70 INTERCHANGE, END SH 6A
006B	30.270	30.407	077	NRA	FROM I-70 GRAND JUNCTION BUS LOOP INTERCHANGE TO THE RAMP ON IN GRAND JUNCTION
006B	30.407	33.753	077	NRB	FROM THE RAMP ON TO MORNING GLORY LANE IN GRAND JUNCTION
006B	33.753	34.375	077	NRA	FROM MORNING GLORY LANE TO JCT I-70 GRAND JUNCTION BUS LOOP, END SH 6B
006C	37.496	39.229	077	NRB	FROM JCT I-70 GRAND JCT BUS LOOP TO 34.00 RD
006C	39.229	42.894	077	RA	FROM 34.00 RD TO 333 FEET WEST FROM IOWA AVE IN PALISADE
006C	42.894	43.212	077	EX	FROM 333 FEET WEST FROM IOWA AVE TO MAIN ST IN PALISADE
006C	43.212	43.257	077	NRB	FROM MAIN ST TO COLORADO RIVER STR H-03-E IN PALISADE
006C	43.257	45.824	077	RA	FROM COLORADO RIVER STR H-03-E TO I-70 INTERCHANGE, END SH 6C
006D	92.001	92.151	045	NRB	FROM JCT SH 13 IN RIFLE TO 6732 FEET WEST OF COUNTY RD 210
006D	92.151	98.659	045	RA	FROM 6732 FEET WEST OF COUNTY RD 210 TO FIRST ST IN SILT
006D	98.659	99.232	045	NRB	FROM FIRST ST IN SILT TO JCT I-70 SILT BUS SPUR
006D	99.232	105.000	045	RA	FROM JCT I-70 SILT BUS SPUR TO 4219 FEET WEST FROM ELK CREEK STR F-06-A
006D	105.000	105.799	045	RB	FROM 4219 FEET WEST FROM ELK CREEK STR F-06-A TO ELK CREEK STR F-06-A IN NEW CASTLE
006D	105.799	107.000	045	NRB	FROM ELK CREEK STR F-06-A IN NEW CASTLE TO 554 FEET WEST OF COUNTY RD 240
006D	107.000	107.105	045	RB	FROM MILEPOINT 107 TO COUNTY RD 240
006D	107.105	110.799	045	RA	FROM COUNTY RD 240 TO I-70 INTERCHANGE, END SH 6D
006E	142.001	142.608	037	NRB	FROM I-70 INTERCHANGE IN GYPSUM TO VALLEY RD
006E	142.608	148.930	037	RA	FROM VALLEY RD TO 1130 FEET WEST OF FIFTH ST
006E	148.930	149.666	037	NRB	FROM 1130 FEET WEST OF FIFTH ST TO JCT I-70 EAGLE BUS SPUR

Possible AZ Category Breaks	
Interstate	
Rural Expressway	
Urban Expressway	
Rural Principal	Urban Principal
Rural Secondary	Urban Mixed
Rural (Dirt) Collector	Urban Low
Service, Frontage and other Access roads	

Conceptual Access Management Decision Flow Chart

Key Design Elements

- Driveway Location and Spacing
- Signal Location and Spacing
- Median Openings (Full or Directional)
- Driveway Geometrics
- Sight Distances
- Design Waivers, - Necessity, Proof, and Time-Based
- Auxiliary Lane Design
- Interchange Crossroad Access Control

Conceptual Access Management Decision Flow Chart

Waiver/Variance Process

- Establish Criteria
- Define Process

Conceptual Access Management Decision Flow Chart

Other Considerations

- Access Management Plans
  - Interagency Agreement
  - Performance-Based
- Interim Permit Approval

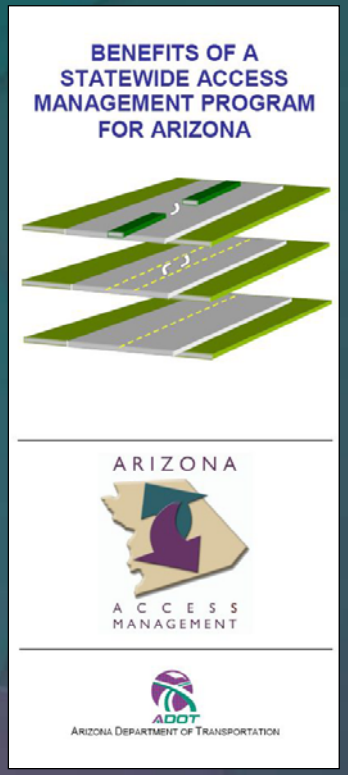
Next Steps

Brief Your Local Officials

- Elected Officials
- Senior Management

- Handouts


ARIZONA STATEWIDE ACCESS MANAGEMENT PROGRAM OVERVIEW
ARIZONA
ACCESS MANAGEMENT
ADOT
ARIZONA DEPARTMENT OF TRANSPORTATION


BENEFITS OF A STATEWIDE ACCESS MANAGEMENT PROGRAM FOR ARIZONA
ARIZONA
ACCESS MANAGEMENT
ADOT
ARIZONA DEPARTMENT OF TRANSPORTATION

- CD

Business and Development Community Participation

- Business/development community focus group
- Identify and recruit 2-3 participants
- Provide URS contact information

District Agency Outreach

- **District level outreach**
- **Three series of meetings**
  - *May/June 2006*
    - *Overview of proposed program*
    - *Feedback from local agencies*
  - *September/October 2006*
    - *Review of Program Framework and Classification System*
  - *March/April 2007*
    - *Program implementation briefings*